Electronic Supplementary Material (ESI) for RSC Advances.
This journal is © The Royal Society of Chemistry 2017

Supplementary materials

Solution combustion synthesis and enhanced gas sensing properties of porous In_2O_3/ZnO heterostructures

Xinwei Zou *, Xiaoyan Yan, Guomin Li, Yuming Tian, Mingang Zhang, Liping Liang

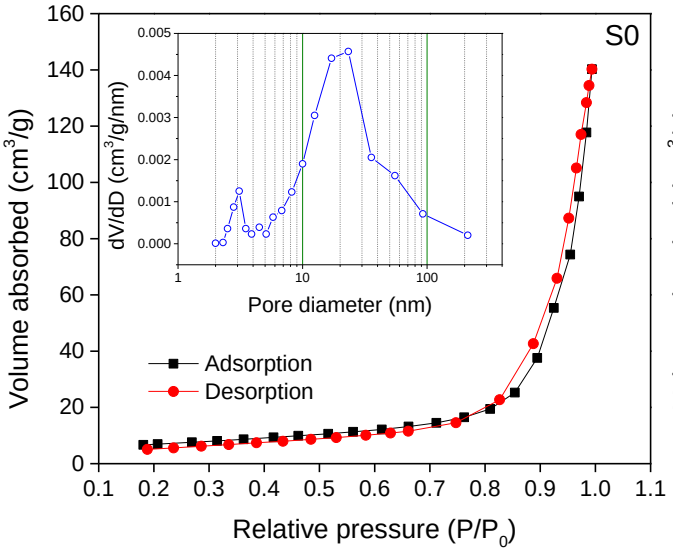
School of Materials Science and Engineering, Taiyuan University of Science and Technology, Taiyuan 030024, PR China

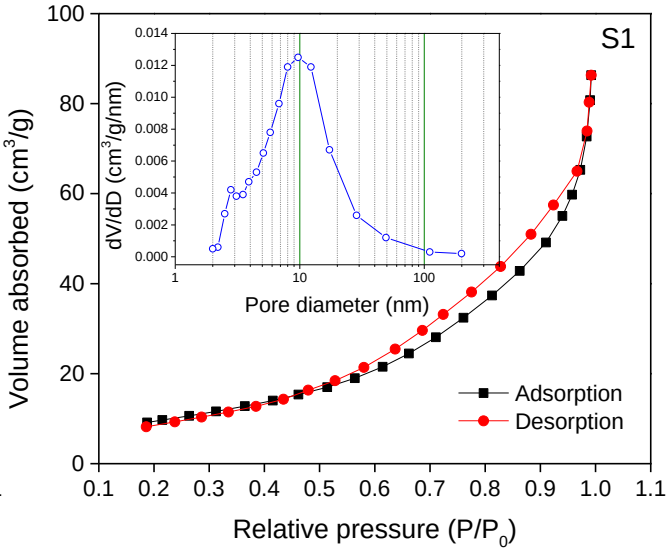
* Corresponding author Tel.: + 86 351 2161126

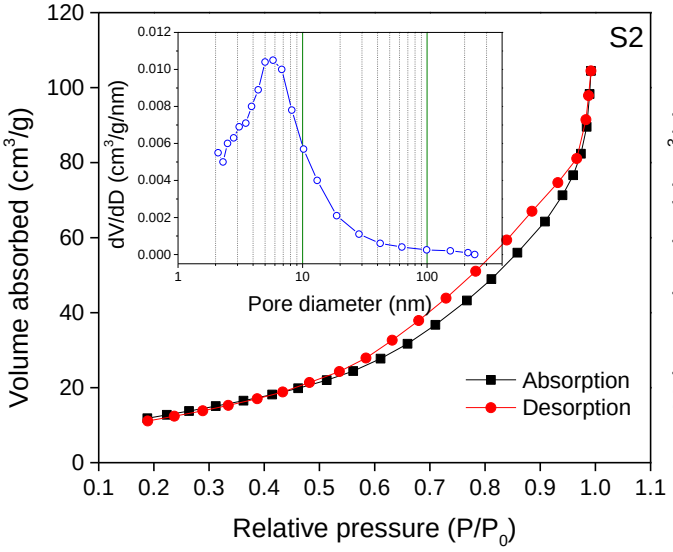
E-mail address: moodland@163.com

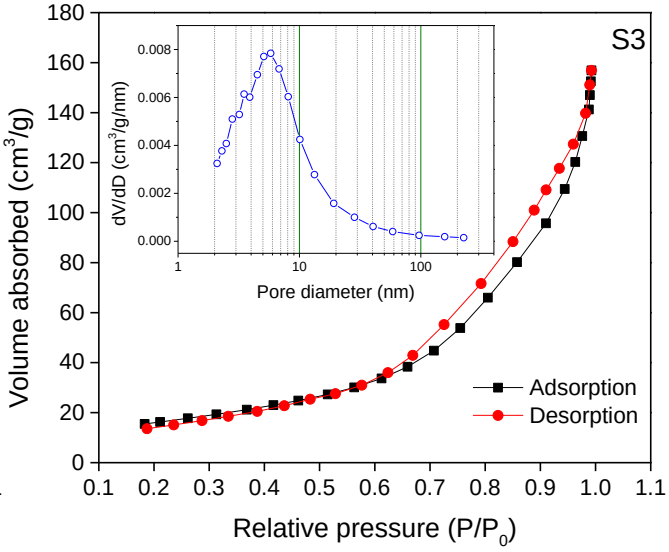
Table S1. Ratios of In_2O_3/ZnO, average crystal sizes, specific surface areas (S_{BET}), major pore sizes and pore volumes of different samples (S0-S5)

Sample	In_2O_3/ZnO	Average crystal size (nm)	S_{BET} (m^2/g)	Major pore sizes (nm)	Pore volume (cm^3/g)
S0	Pure ZnO	13.210	24.70	22.6	0.2169
S1	1:15	14.709	35.46	9.8	0.1616
S2	1:12	13.909	46.23	5.7	0.1335
S3	1:10	13.763	58.80	5.8	0.2427
S4	1:8	13.314	60.39	6.3	0.2733
S5	1:5	11.642	62.73	7.9	0.2879


S0
Volume absorbed (cm3/g)
Relative pressure (P/P0)
dV/dD (cm3/g/nm)
Pore diameter (nm)
Adsorption
Desorption


S1
Volume absorbed (cm3/g)
Relative pressure (P/P0)
dV/dD (cm3/g/nm)
Pore diameter (nm)
Adsorption
Desorption


S2
Volume absorbed (cm3/g)
Relative pressure (P/P0)
dV/dD (cm3/g/nm)
Pore diameter (nm)
Absorption
Desorption


S3
Volume absorbed (cm3/g)
Relative pressure (P/P0)
dV/dD (cm3/g/nm)
Pore diameter (nm)
Adsorption
Desorption

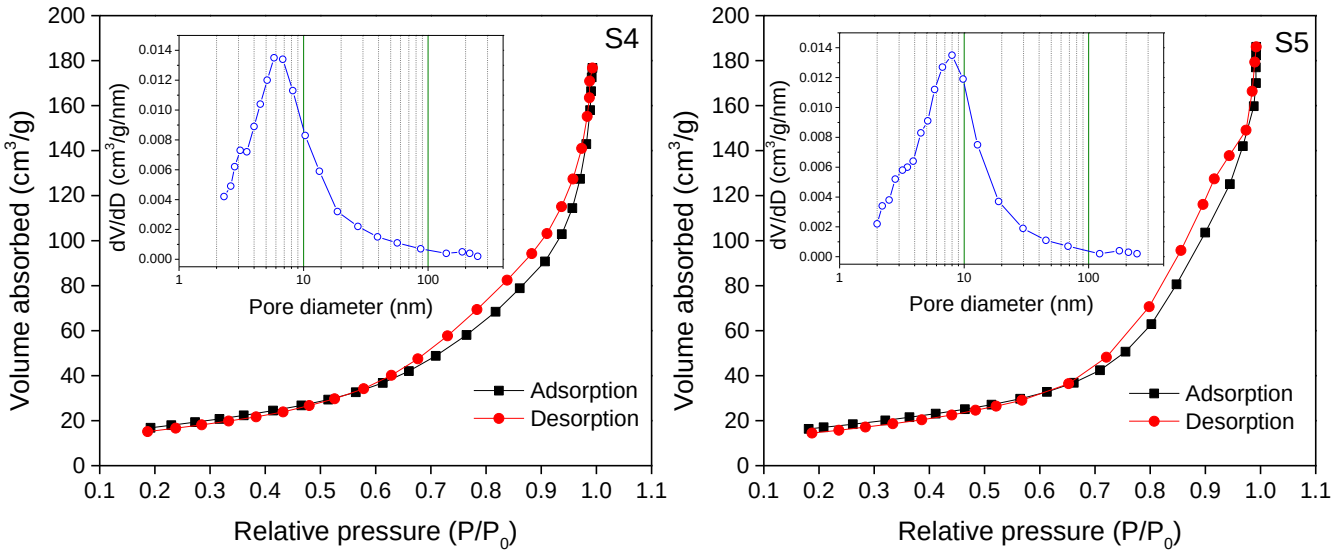


Fig. S1 N_2 adsorption–desorption BET isotherms of different samples (S0-S5). The inset shows the pore size distribution.